

Tulane Institute on Water Resources Law and Policy

Water In Perspective: Louisiana, the Nation, and the Future

Mark Davis

Tulane Institute on Water Resources Law and Policy

October 16, 2013

The Waters We Manage

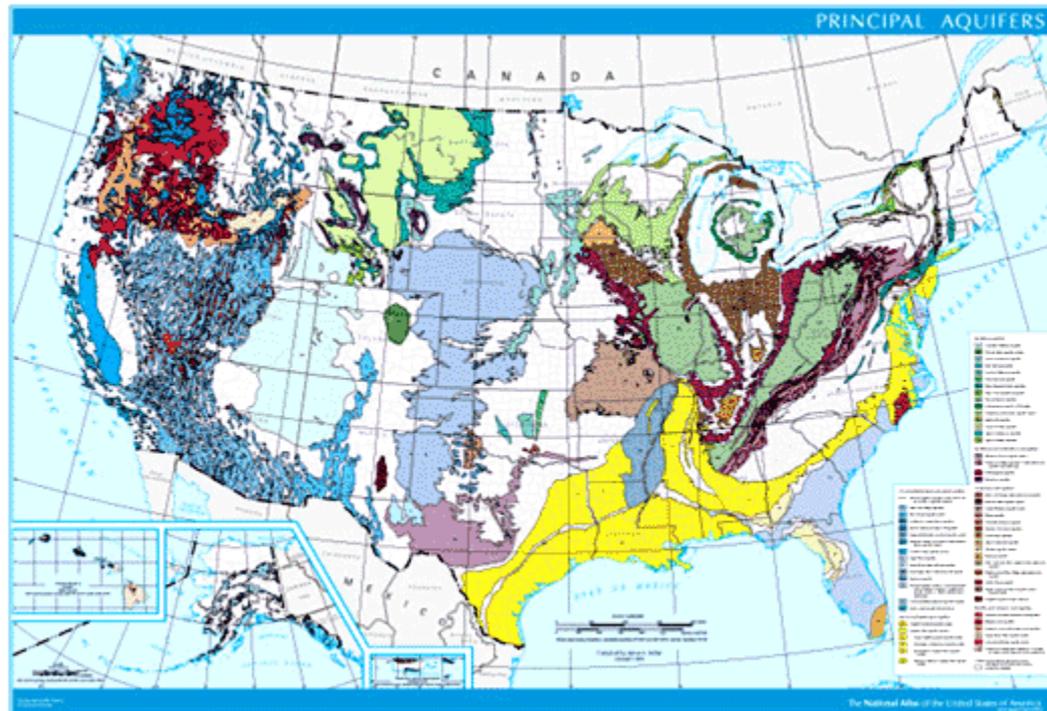
Surface Water + Ground Water
+ Precipitation = **Total Water**

Louisiana and the Nation's Rivers

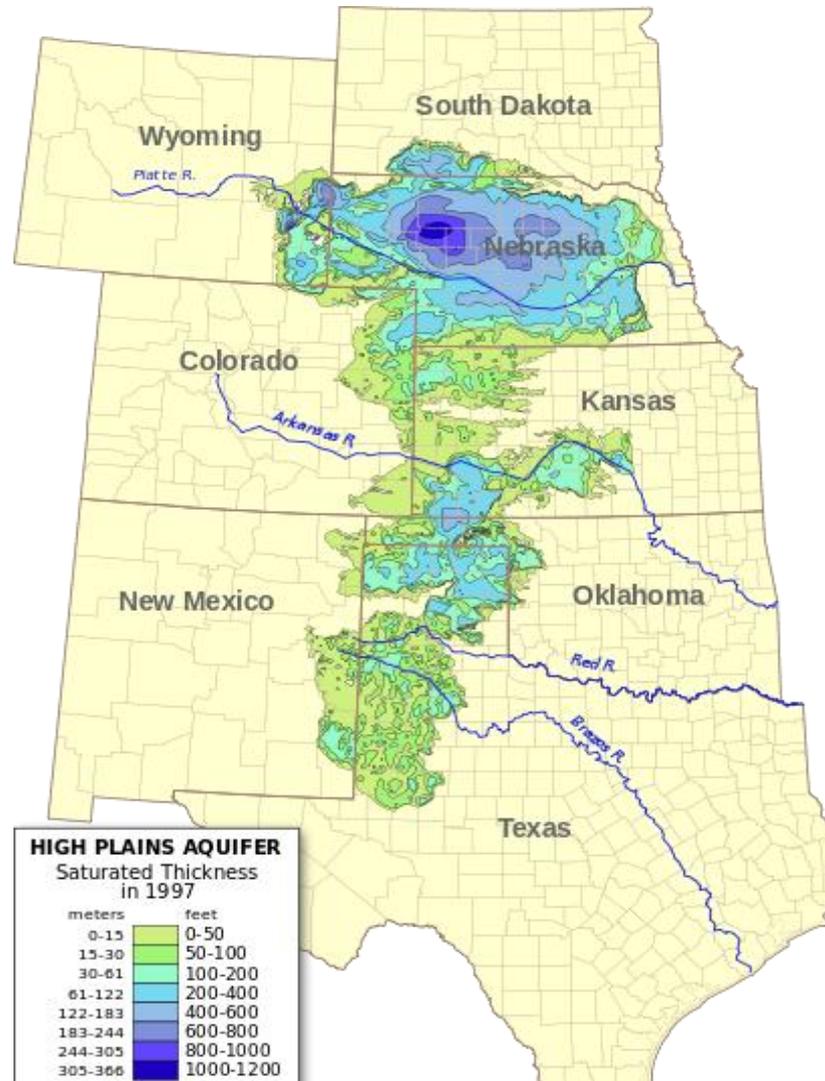


This map is not to scale.

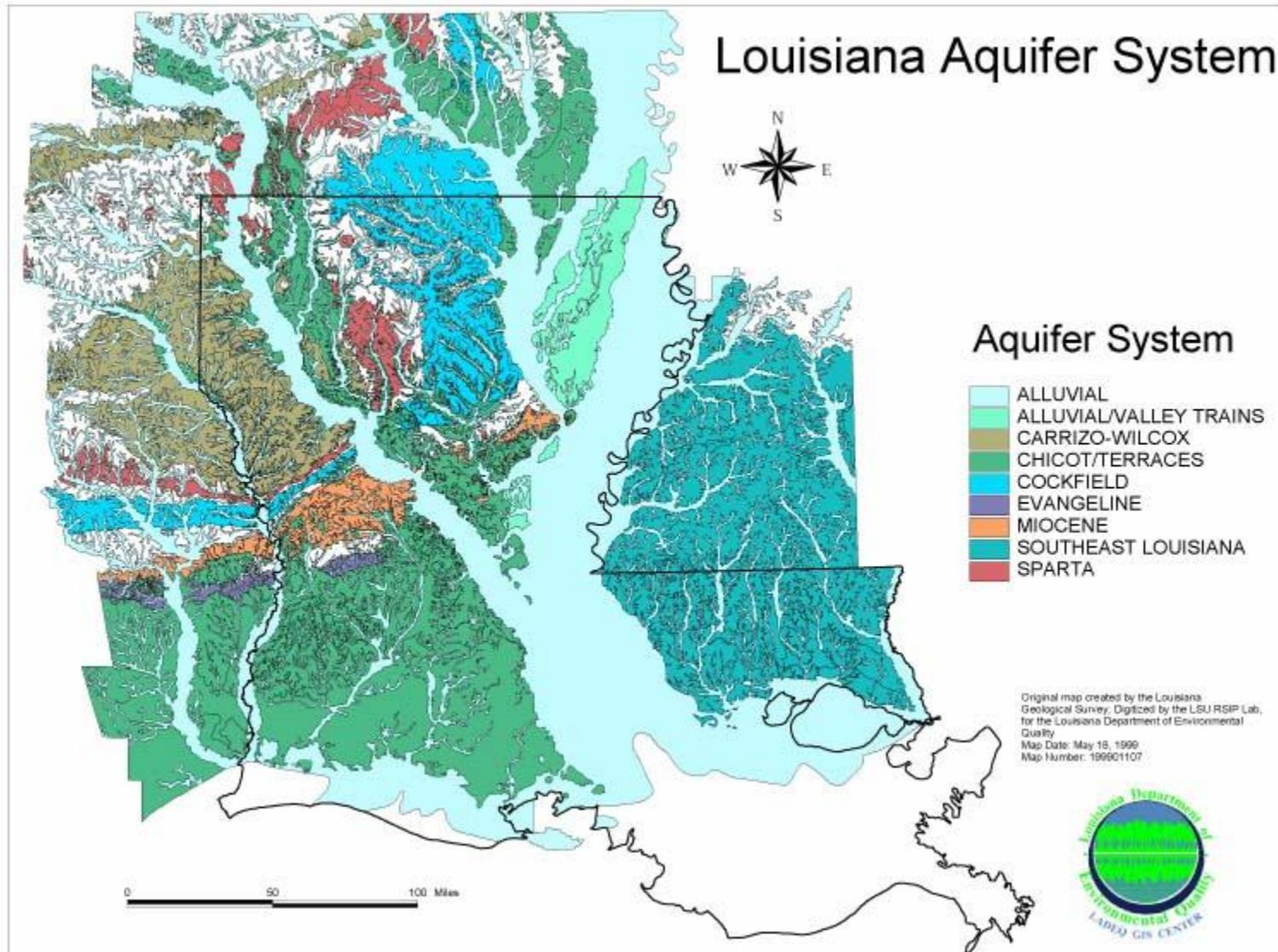
Aquifers of the United States



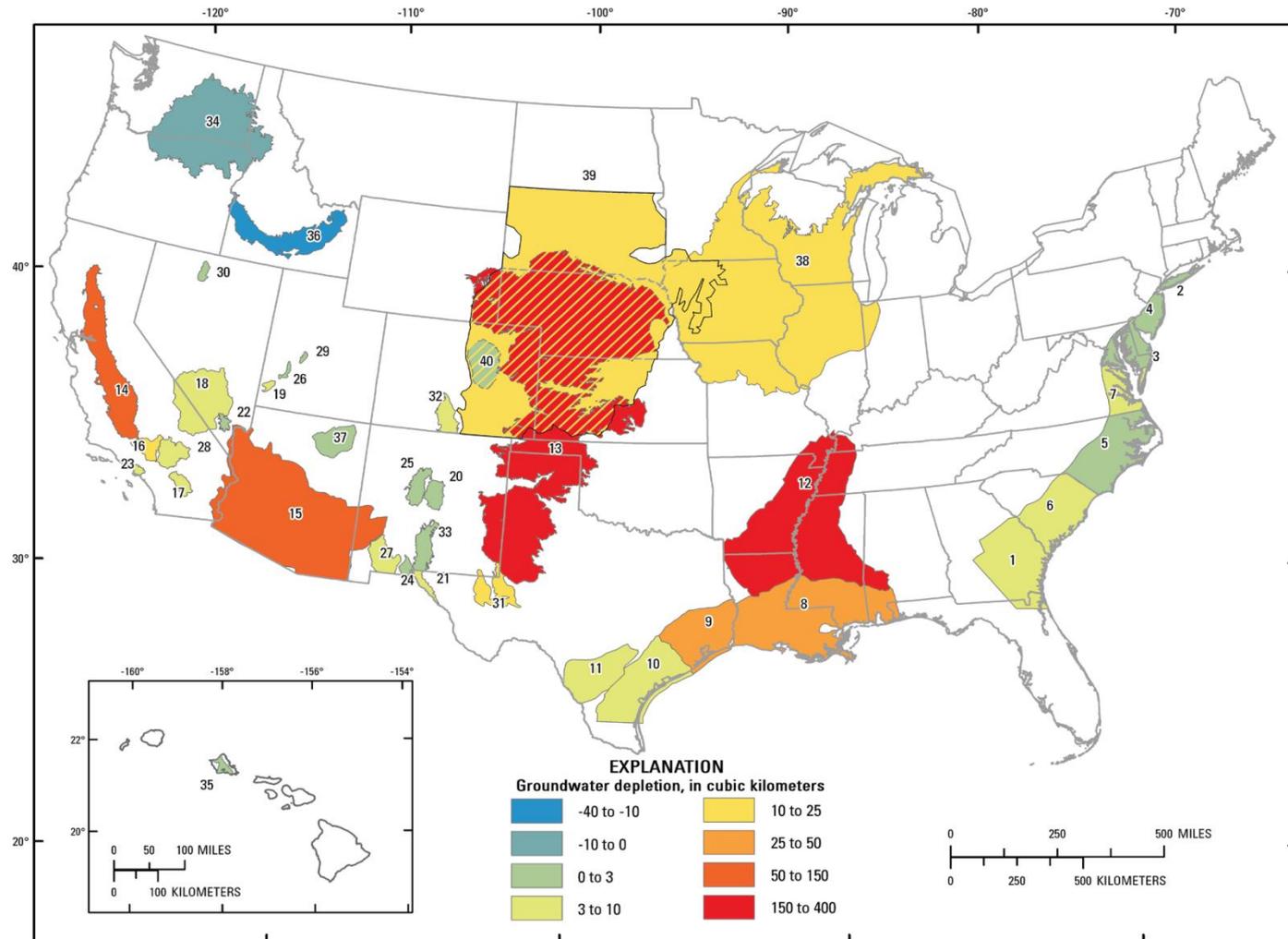
The High Plains/Ogallala Aquifer



Louisiana's Aquifers



Aquifer Depletion 1900-2008

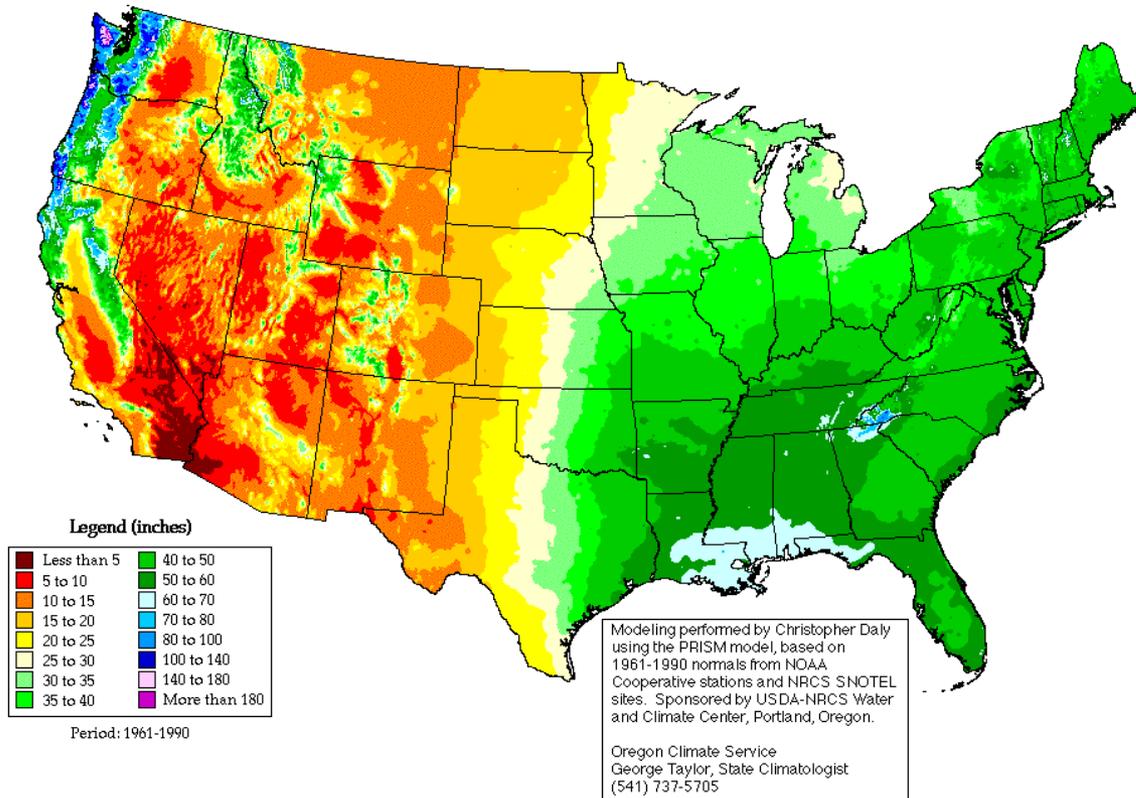


Base from U.S. Geological Survey digital data, 1972, 1:2,000,000
 Albers Equal-Area Conic Projection
 Standard parallels 29° 30' N and 45° 30' N, central meridian 96° 00' W

Precipitation

Annual Average Precipitation

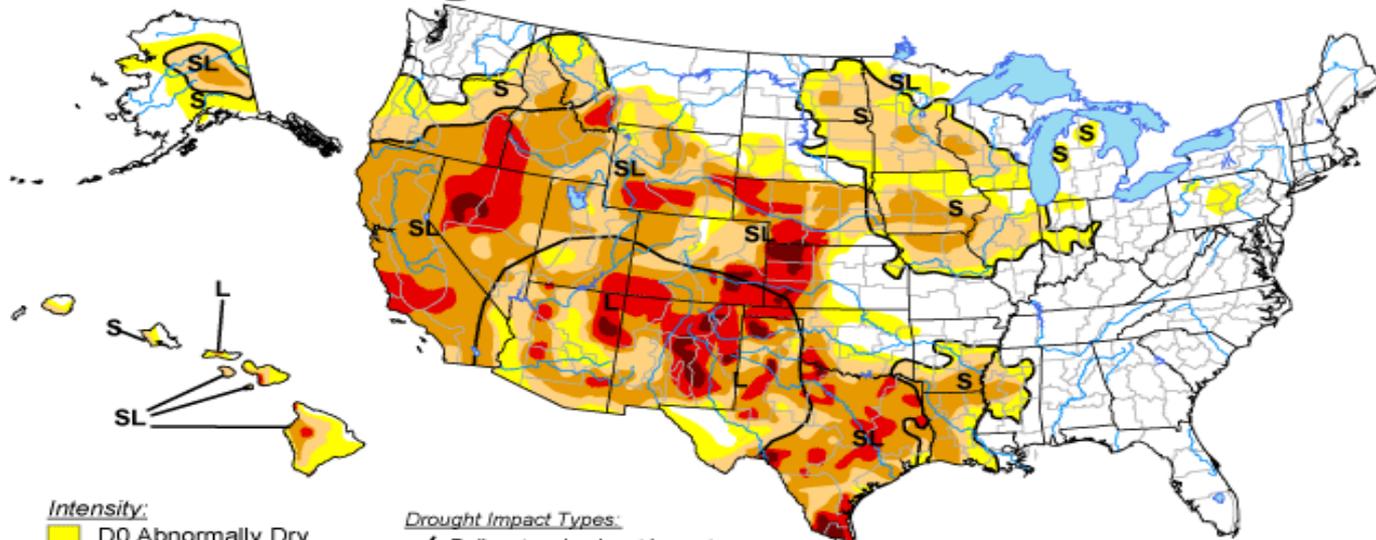
United States of America



Drought

U.S. Drought Monitor

September 3, 2013
Valid 7 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Drought - Moderate
-  D2 Drought - Severe
-  D3 Drought - Extreme
-  D4 Drought - Exceptional

Drought Impact Types:

-  Delineates dominant impacts
- S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically >6 months (e.g. hydrology, ecology)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://droughtmonitor.unl.edu/>



Released Thursday, September 5, 2013
Author: David Miskus, NOAA/NWS/NCEP/CPC

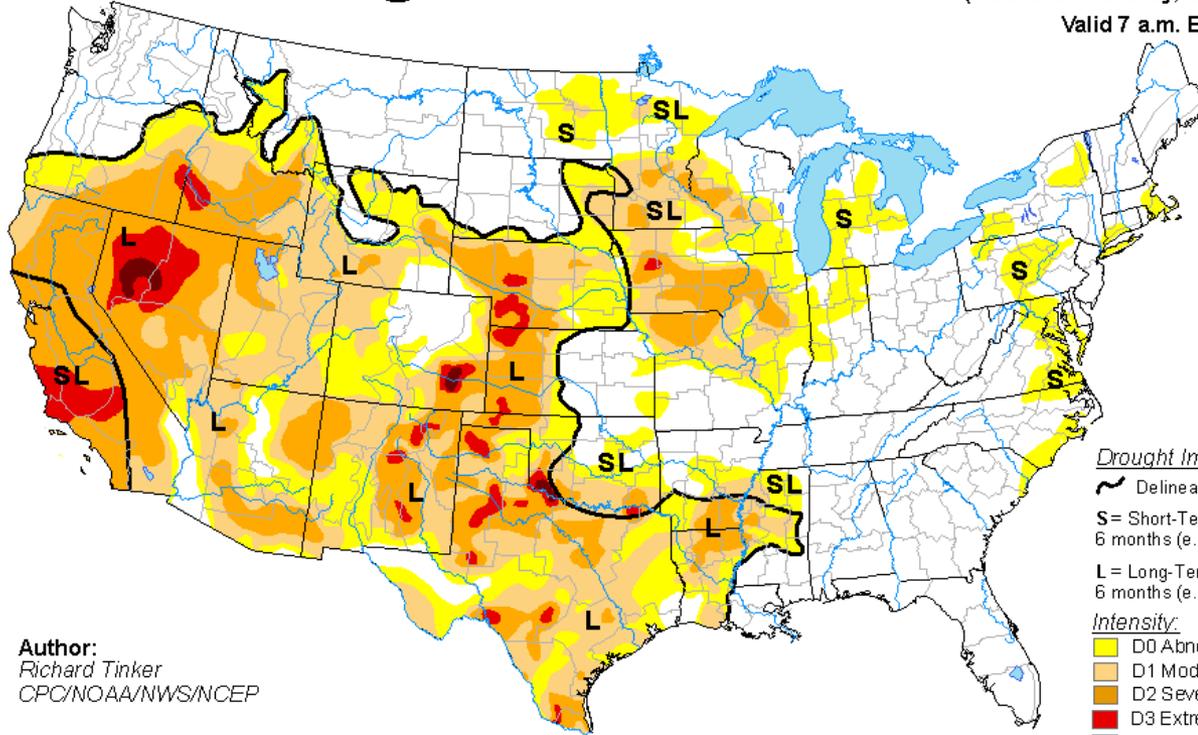
Drought

U.S. Drought Monitor

October 8, 2013

(Released Thursday, Oct. 10, 2013)

Valid 7 a.m. EDT



Author:
Richard Tinker
CPC/NOAA/NWS/NCEP

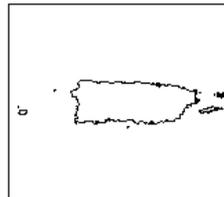
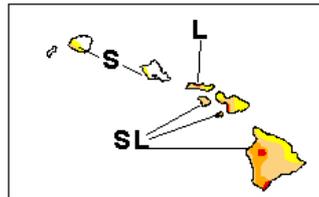
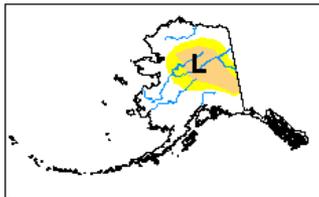
Drought Impact Types:

-  Delineates dominant impacts
- S= Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L= Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

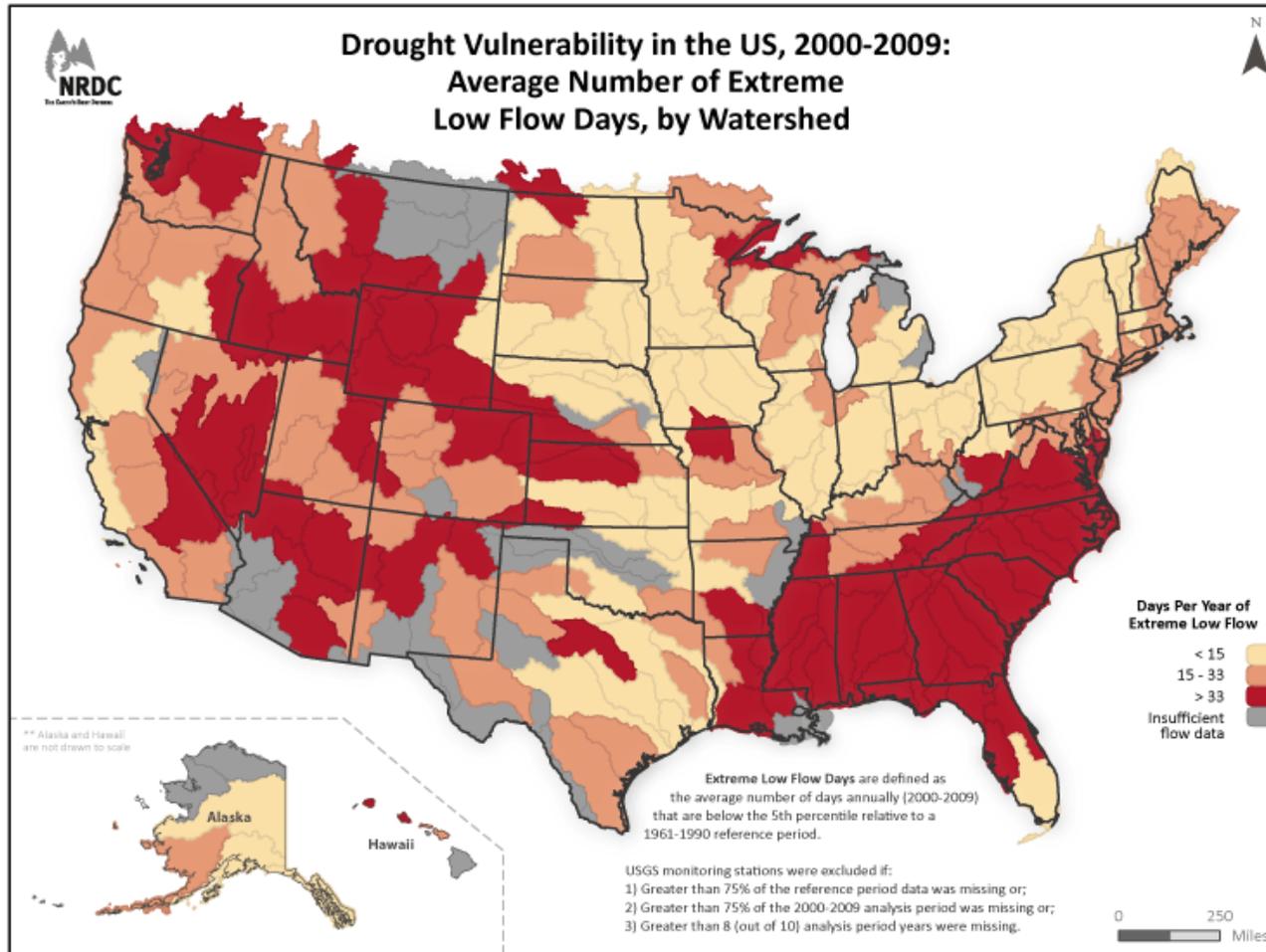
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

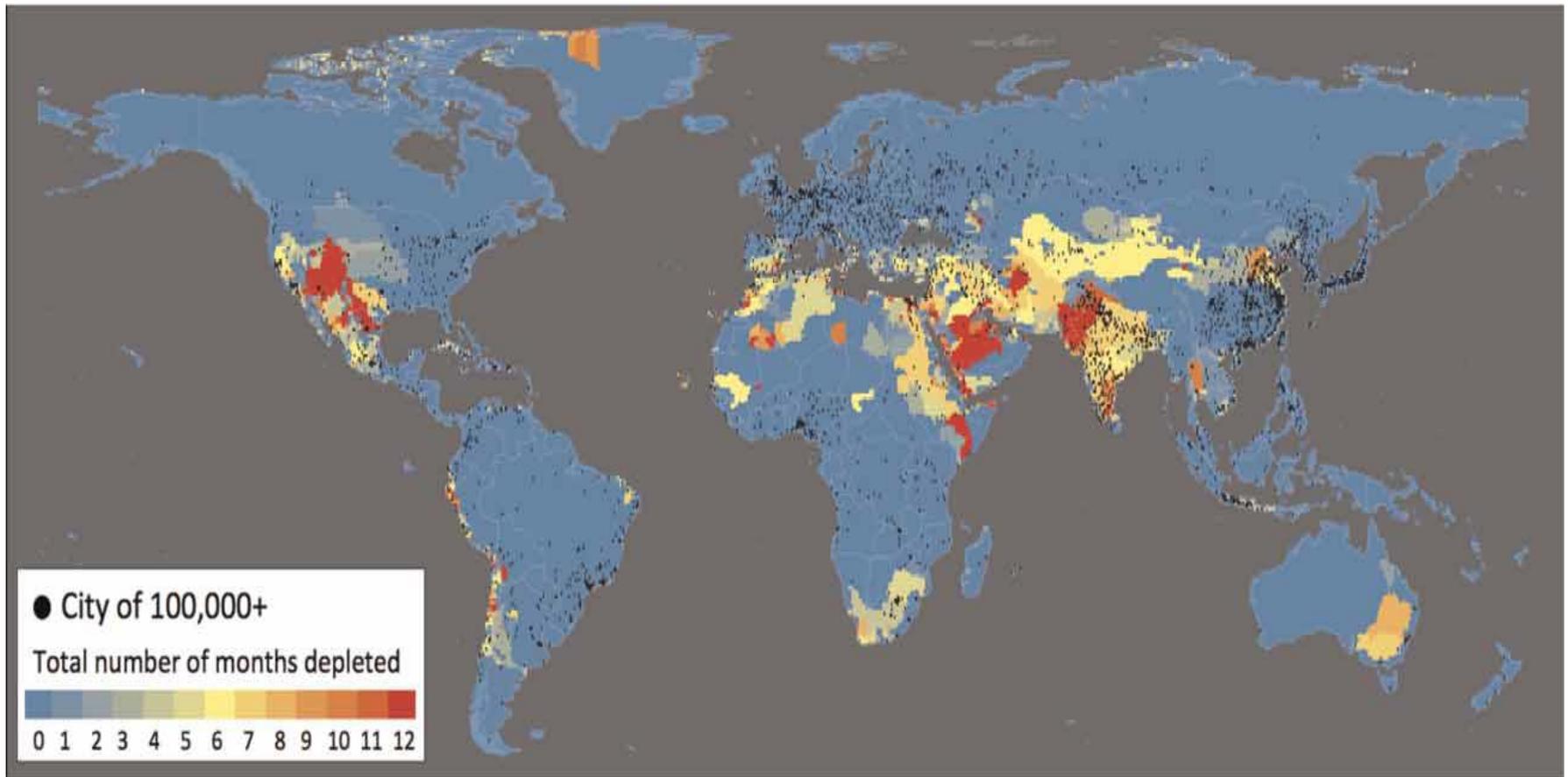


<http://droughtmonitor.unl.edu/>

Recent US Drought Vulnerability



Urban Water Vulnerability



THE KANSAS CITY STAR.

Breaking News

High Plains Aquifer will be 69
percent depleted in 50 years, K-
State study says

By ROXANA HEGEMAN The Associated Press

August 26, 2013

The Colorado River/Lake Mead



Up for Grabs: Water in America Today



TIME

**Is Southern California Finally
Getting Serious About Its Water
Crisis?**

By Jens Erik Gould / Los Angeles Monday, Jan.
03, 2011

Bloomberg

**Drought-Induced Curb
on Lake Powell Water
Is First-Ever**

By Rachel Layne - Aug 16, 2013

CHARLOTTE BUSINESS JOURNAL

**Charlotte water
conference focuses on
limited resources**

Date: Thursday, September 15, 2011, 11:56am
EDT

Timesfreepress.com

Georgia lawmakers eye Tennessee water again

Monday, February 11th, 2013

by [Lindsay Burkholder](#)

National Geographic

Water Grabbers: A Global Rush on
Freshwater, November 30, 2012



E&E Publishing Service

**WATER: Could Midwestern supplies
be the answer to Las Vegas'
woes? *(Thursday, April 9, 2009)***

denverpost.com

**Denver suburbs look for
new sources as aquifer
levels fall** *(04/28/2011)*

Chicago Sun-Times

April 29, 2013

Editorial: Mississippi River problems felt here

Bloomberg

**Drought-Induced
Curb on Lake Powell
Water Is First-Ever**

By Rachel Layne - Aug 16, 2013



Florida governor says he'll sue Georgia for water

August 14, 2013

THE KANSAS CITY STAR.

The Ogallala Aquifer, an important
water resource, is in trouble

September 1

By KAREN DILLON

theguardian

A Texan tragedy: ample oil, no water

Fracking boom sucks away precious water from beneath the ground, leaving cattle dead, farms bone-dry and people thirsty

August 11, 2013



Missouri River Water an Option for KS

August 9, 2013



Bureau of Reclamation Forecasts Lower Water Release from Lake Powell to Lake Mead for 2014

August 13, 2013

CLIMATEPROGRESS

Sin City Runs Dry: Drought in
The Land of Fountains

August 16, 2013

Black Hills Pioneer

October 3, 2013

**Corps, states, tribes
clash on water rights**

Water and the Law

Water Law Gumbo

Louisiana Law

Constitution

Civil Code

Mineral Code

Jurisprudence

State Law (30 other States)

Federal Law

Constitution

Servitudes

Statutes

Compacts

Native American and Reserved Rights

Water Law Gumbo (con't.)

Surface Water

Flowing/Non Flowing

Coastal/Tidal

Navigable/Nonnavigable

Riparian Rights/Littoral Rights

Ground Water

Diffuse Waters (storm water and flood water)

Drainage

Special Water Management Units (Sabine, Capital Area)

The Game is On

Tarrant v Herrmann (Texas v Oklahoma over the Red River) Decided by U.S. Supreme Court 2013

Texas v New Mexico (Dispute over the Rio Grande and aquifers. Pending before U.S. Supreme Court)

Montana v Wyoming (Dispute over the Yellowstone River and aquifers with specific attention on fracking. Trial underway in U.S. Supreme Court)

Tri-State Water Rights Litigation (Suit between GA, FL, and AL over Apalachicola, Chatahoochee and Flint Rivers. 11th Cir ruled in favor of GA in 2011.)

Florida v Georgia (Dispute over the Apalachicola River system. Petition filed in U.S. Supreme Court)